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ABSTRACT

This paper, first in a series of special reports concerning disability and the family, presents a review of the relationship between abuse and disabilities, arguing that roughly 25 percent of all disabilities are caused by child or spousal abuse. A national survey revealed that 12 states have legislation addressing these issues, and the paper includes excerpts, with comments from the relevant statutes of each of these states. The states are: Alaska, Connecticut, Florida, Illinois, Indiana, Maine, New Jersey, New York, Rhode Island, Virginia, Washington, and Wyoming; a 13th state, California, has pending legislation. Recommended components of model legislation are identified. The paper also provides a synopsis of a literature search investigating incidence, prevalence and extent of disability caused by abuse and neglect. An analysis of associated fiscal costs is provided suggesting the cost effectiveness of greater prevention efforts. Finally, observations are made regarding the need for a national program to confront this problem. (Contains 60 references.) (PB)

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ABUSE CAUSES DISABILITY

ED 361 929

A REPORT FROM SPECTRUM INSTITUTE

By

Nora J. Baladerian, Ph.D.

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FIRST IN A SERIES: This is the first of a series of special reports concerning disability and the family. Additional reports are available upon request.

ABUSE CAUSES DISABILITY

A Report From Spectrum Institute

By

Nora J. Baladerian, Ph.D.

The relationship between abuse and disability has not been well researched or publicized. However, studies reveal that approximately 25% of all disabilities are directly caused by abuse. Formal data collection efforts to document the relationship between abuse and disability do not exist in most States or local municipalities. There are few laws directly addressing this problem.

Prevention of 25% of all disabilities would not only represent a substantial fiscal savings nationally, but would alleviate untold and needless human suffering, not only to the abuse victim, but his or her family and associates.

This paper provides a State-of-the-Art review of the extent of the problem, associated fiscal and social costs, and recommendations for a national policy.

Contents of This Paper

1. Report of a national survey on legislation addressing the issues of abuse and disability.
2. Report of an extensive literature search conducted in June 1991 to investigate incidence, prevalence and extent of disability caused by abuse.
3. An analysis of associated major fiscal costs.
4. Observations regarding the need for a national program with funding to eliminate this preventable problem.

LEGISLATION ADDRESSING ABUSE AND DISABILITY

On May 7, 1991 a search was conducted using the Westlaw Data Base, requesting all statutes that included key terms regarding disability and abuse. The search revealed that 11 states have legislation addressing both issues. The following describes the relevant statutes.

ALASKA

STATUTE:

A 1988 amendment to the Business and Professions Rules for Psychologists (Title 8, Chapter 86 Article 5) adds to the mandatory reporting requirement for child and elder abuse, the reporting of abuse of disabled persons. Disabled persons are defined as those with "a physical or mental disability or impairment...", as defined in a separate Code. [Alaska Statutes, Title 8, Section 08.86.200]

COMMENT:

This statues makes the reporting of abuse of disabled persons mandatory, regardless of age or type of abuse. (Whereas in other states, certain types of abuse are only subject to voluntary i.e, non-mandatory reporting. This is definitely an improvement.)

CONNECTICUT

STATUTE:

In 1969 the following legislation for Title 17. Social and Human Services and Resource, Chapter 310 included the following language:

..."Services shall not be denied to any such [defined] child or youth solely because of disabilities." Further, the department shall "establish staff development and other

training and educational programs designed to improve the quality of departmental services and programs ...on any matter related to the promotion of the well being of children, or the prevention of mental illness, emotional disturbance, and ...other disabilities in children and youth...". "The master plan shall include, but not be limited to : ...(6)... a written plan for the prevention of child abuse and neglect...". [Connecticut Statutes Title 17 Section 17-412]

COMMENT:

The creation of a master plan is imperative for each state, and should include the issue of abuse-related disability. This is excellent. Also, the strong and positive anti-discrimination statement should pertain to all children's services.

FLORIDA

STATUTE:

Title XXX Social Welfare, Chapter 411 Handicap Prevention Part II Prevention and Early Assistance, amended in 1986, includes the following: "The Legislature finds and declares that 50 percent of handicapping conditions in young children can be prevented, and such conditions which are not prevented can be minimized by focusing prevention efforts on high-risk pregnant women and on high-risk and handicapped preschool children and their families. The Legislature further finds that by preventing handicaps in preschool children, infant mortality and child abuse can be reduced and this state can reap substantial savings in both human potential and state funds."

Title XXX Social Welfare, Chapter 415 Protection from abuse, neglect, and exploitation makes the following statements: "...The prevention of child abuse and neglect shall be a priority of this state...The Department of Health and Rehabilitative Services shall establish an interprogram task force comprised of ...developmental services..." "The Department of Education and the Department of

Health and Rehabilitative Services shall work together on the ...adaptation of curriculum materials in providing instruction on

....prevention of child abuse and neglect. The curriculum materials shall be geared toward a sequential program of instruction at the four progressional levels, K-3, 4-6, 7-9, and 10-12. Strategies for encouraging all school districts to utilize the curriculum are to be included in the comprehensive state plan for the prevention of child abuse and child neglect."

Preamble (Laws 1982, c. 82-62) states as follows:

"WHEREAS, some studies on prison populations have indicated that as many as 80 to 90 percent of the inmates had been abused as children, and

"WHEREAS almost 65 percent of the dependent children admitted to state hospitals in 1978 had histories of abuse and neglect, and

"WHEREAS national studies have shown that child abuse is the reason 1500 children a year develop cerebral palsy as a result of brain damage and that many children become mentally retarded, and

"WHEREAS the Legislature recognizes the costs associated with child abuse and neglect not only with regard to the victimized child and the child's family but also the hidden costs of child abuse in later generations, and

"WHEREAS, the ever increasing number of children who are abused heightens the concern of the Legislature about the need to save lives of children who are abused and neglected, to avoid the physical and emotional suffering caused by the abuse and neglect, and the need to reevaluate the approach the state has heretofore taken with regard to this immensely complex and important family problem, . ."

The Florida statute continues:

"Primary prevention and training program. A primary prevention and training program shall include all of the following: ...(L) The relationship of child abuse to handicaps in young children...Prevention training centers. Each training center shall..."a. Meet the special needs of children including but not limited to, the needs of disabled and high-risk children." [Florida Statutes Title XXX Section 415.5015]

COMMENT:

The Florida statutes have to rank highest among the states for making the prevention of disability caused by abuse a priority for the State. The legislation acknowledges both the human and financial costs associated with this problem, and the current enormity of the problem. Provisions for actual intervention and prevention efforts are included in the legislation.

ILLINOIS

STATUTE:

In 1988 the following was added to CHAPTER 23 Charities and Public Welfare Abused and Neglected Child Reporting Act, continuing education program "...the Department shall conduct a continuing education and training program...to encourage the fullest degree of reporting of known and suspected child abuse and neglect. The program shall inform the general public and professionals of the nature and extent of child abuse and neglect. Such information may also include special needs of mothers at risk of delivering a child whose life or development may be threatened by a handicapping condition."

Further, the Director of the Welfare Department shall "...appoint a state-wide citizens committee on child abuse and neglect...composed of individuals of distinction in human services, ...needs and rights of the disabled..."

COMMENT:

The Illinois legislation does not go quite far enough in its prevention approach. Included in the training should obviously be information related to how disabilities are caused by abuse. The formation of a citizens committee is very positive, as it avoids the difficulties that sometimes beset large bureaucracies. However, we do need the participation of those officials, so the addition of a governmental inter-agency committee, both at the state and local levels is appropriate. [Illinois Statutes Chapter 23 Section 2061.7]

INDIANA

STATUTE:

In 1985 Title 31 Family Law, Article 6 Juvenile Law Chapter 11 Child Abuse was amended to include into a community-wide, multidisciplinary child protection team convened by the director of the county department of public welfare, the possible inclusion of "...an individual trained in mental retardation, representative of a community mental retardation of other developmental disabilities center OR representative of a local child abuse and neglect group". [Indiana Statutes Title 31 Section 31-6-11-14]

COMMENT:

The establishment of the interdisciplinary team is positive. However, the statements regarding the "possible inclusion" of these identified members should be strengthened to include them as required members. Also, representatives of both developmental disabilities centers AND child abuse and neglect groups should be mandatory members.

MAINE

STATUTE:

In 1990 Maine followed the lead of Indiana, but went one step further, making a "shall" provision for a community coordination committee, with membership including as follows: "Membership of the community coordinating committee shall included representatives from the appropriate regional office of the Department of Human Services, ...the Bureau of Mental Retardation or a local program for the mentally retarded...at least one person who has experienced child abuse or neglect either directly or as a family member." [Title 22, Maine Revised Statutes, Annotated, Section 3875].

COMMENT:

This is the only statute providing for the participation of a member who would be considered a consumer. This is excellent and should be adopted by the other States. In addition, it might be good to add a primary or secondary consumer from the disability experience.

NEW JERSEY

STATUTE:

In this legislation, effective 1987, the "Legislature...finds ...that: the causes of many cases of developmental disabilities, such as...child abuse and neglect, and accidents, are preventable; and it is in the best interests of the citizens of the State of New Jersey to establish a permanent office in the State Department of Human Services to combat the causes of mental retardation and developmental disabilities." This legislation established the Office for Prevention of Mental Retardation and Developmental Disabilities in the Department of Human Services, which was charged with "developing a long-range comprehensive plan for the prevention of mental retardation and developmental disabilities; developing public information

campaigns about the causes of disability and the means for preventing disability;..." [Title 30 New Jersey Statutes Annotated, Section 30:1AA-10]

COMMENT:

The establishment of a Permanent Office on Prevention of Mental Retardation is excellent, and provides a perfect vehicle for the public education, professional training, and creation and implementation of prevention, intervention and treatment efforts.

NEW YORK

STATUTE:

In 1991 an amendment was made to Article 23 - Fair Treatment Standards For Crime Victims Act as follows: "Each crime victim-related agency shall review its practices, procedures, services, regulations and laws to determine the adequacy and appropriateness of its services with respect to crime victims, including victims with special needs, particularly the elderly, disabled, or victims of child abuse..." A further requirement is the submission of a report to the governor from each agency regarding their findings and recommendations, following their review.

An additional section requires ..."the chief administrator of the unified court system shall review court practices, procedures, services, regulations and laws to determine the adequacy and appropriateness of its services with respect to crime victims, including victims with special needs, particularly the elderly, disabled or victims of child abuse. Following the review a report must be forwarded to the governor with findings and recommendations. [McKinney's Executive Law, Section 643]

COMMENT:

This is great! It requires crime-victim related service programs to be non-discriminatory in the provision of their services to persons with disabilities. This could result in a vertical prosecution system for persons with special needs.

RHODE ISLAND

STATUTE:

In 1990 legislation was enacted distinguishing between those child abuse perpetrators whose abuse resulted in permanent disfigurement or disability, and those which do not, making a clear policy decision, creating legal authority; it provides that the person who allows the abuse to occur is equally as guilty as the person who actually committed the abuse. [General Laws of Rhode Island Annotated Title 11 Section 11-9-5.3]

COMMENT:

This is also excellent. If publicized through a well designed public information campaign, has the potential for significantly impacting the incidence of child abuse. Perhaps a catchy impactful slogan could be used, similar to the "Use a gun, go to jail" campaign. This could alert would-be perpetrators that if a child in his/her care became disabled, the punishment is severe. Although it is true that this law is post-abuse, its potential for primary prevention is great.

VIRGINIA

STATUTE:

Title 63.1 Welfare (Social Services), Chapter 12.1.1. Child Abuse and Neglect, authorized the formation of an Advisory Committee on Child Abuse and Neglect, and states that "...it shall be composed of ...persons appointed by the Governor...including the Commissioner of Mental Health, Mental Retardation and Substance Abuse Services...The Board shall ...advise...on matters concerning programs for the prevention and treatment of abused and neglected children and their families." [Code of Virginia, Title 63.1, Section 63.1-248.16]

COMMENT:

This committee composition is good, as it is all inclusive.

WASHINGTON

STATUTE:

Title 26. Domestic Relations, Chapter 26.44 - Abuse of Children and Adult Dependent or Developmentally Disabled Persons -- Protection -- Procedure. 26.44.070 Central registry of reported cases of child abuse or abuse of adult dependent or developmentally disabled persons -- confidentiality - penalty.

These laws were amended in 1987 as follows: "The department shall maintain a central registry on reported cases of child abuse or abuse of an adult dependent or developmentally disabled person. Records...shall be considered confidential and privileged and will not be available except upon court order to any person or agency except..."

Title 43 State Government - Executive, Chapter 43.20A - Department of Social and Health Services. 43.20A.710. State employment in the supervision, care, or treatment of children, mentally ill persons, or developmentally disabled persons - investigation of conviction records or pending charges. Authorizes background checks on employment applicants, including an examination of state and national criminal identification data and the child abuse and neglect register...for determining the character, suitability and competence of these applicants.

Chapter 43.43.832 authorized background checks as follows: "businesses and organizations providing services to children, developmentally disabled persons, and vulnerable adults need adequate information to determine which employees or licensees to hire or engage. Therefore, the Washington state patrol criminal identification system may disclose...an applicant's record for convictions of offenses against children or other persons, convictions for crimes relating to financial exploitation, but only if the victim was a vulnerable adult, adjudications of child abuse ...the state board of education may request Washington state patrol criminal identification information; also authorized are the law enforcement agencies, the

office of the attorney general, prosecuting authorities, and the department of social and health services, to aid in the investigation and prosecution of child, developmentally disabled and vulnerable adult abuse cases and to protect children and adults from further incidents of abuse. [Washington Statutes, Title 26, Section 26.44.070]

COMMENT:

This registry could be improved if there were mandatory identification of child abuse victims who have or acquire a disability. The registry should also be allocated adequate funding. The registry could the one central data collection and retrieval system for the state on both child and dependent adult abuse information. No other state has approached the issue of employment background checks related to abuse perpetration. This is another leadership position taken by Washington State.

WYOMING

STATUTE:

A statute dealing with the need for a predisposition study and report states: "After a petition is filed, the court shall order a predisposition study and report. The study and report shall also cover:...the presence of child abuse and neglect histories, learning disabilities, physical impairments and past acts of violence; and ...other matters relevant to the child's present status". [Wyoming Statutes of 1977, Title 14, Section 14-6-227]

COMMENT:

This allows for the identification of special needs of children in the juvenile court system. Hopefully, this correlates positively for special services including special educational services, mental health intervention, and attention from the disability specialists in the system. Another important aspect in service delivery to the special needs/abused child.

CALIFORNIA

PENDING LEGISLATION:[1]

A bill was introduced February 14, 1991 by Senator Diane Watson, making an appropriation for local law enforcement agencies to report to the Department of Justice "any information that may be required relative to any criminal acts or attempted criminal acts to cause physical injury, emotional suffering, or property damage where there is a reasonable cause to believe that the crime was motivated, in whole or in part, by the victim's race, ethnicity, religion, sexual orientation, or physical or mental disability."

This bill has passed out of committee and is currently awaiting passage by the full Legislature and the approval of the Governor.

COMMENT:

This bill authorizes funding for an existing "Hate Crime" statute which would allow the statute to finally be implemented.

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[1]Although not yet enacted as a statute, this bill from California is offered for information only. The bill was not found by the Westlaw search.

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MODEL LEGISLATION ADDRESSING DISABILITY CAUSED BY ABUSE SHOULD INCLUDE THESE FACTORS:

Each state should adopted legislation addressing disability caused by abuse. Certainly the Florida legislation can be used as the primary model, as it:

* Makes a strong statement of legislative intent, suggesting strategies to combat the problem;

* Mandates the development of a prevention curriculum to be used in *all schools* (i.e. including special education and other alternative educational programs); and

* Mandates the creation of a State Inter-Agency task force.

In addition, model legislation should include creation of the following policies and implementation mechanisms:

* State-wide citizens advisory committees, with membership including persons with training in child abuse and disability, among others.

* Local citizens and inter-agency committees, with similar composition, and duties to provide advice and direction to the appropriate entities.

* Establishment of a Permanent Office of Disability and Abuse, with appropriate funding to conduct the needed work, including data collection, prevention and intervention programs.

* Development and implementation of public education campaigns, to alert the general public to the dangers of physical, environmental, and other types of abuse, and their causality of disabilities.

* Assure that crime victims with special needs have appropriate access to legal, social, mental health, educational, health, and other services that may be required. A review of access to these services should be conducted, forwarded to the Permanent Office of Disability and Abuse, and following the review of the report by the various citizens and Inter-Agency committees, then be forwarded with their recommendations to the Governor and the Legislature.

* Increase the punishment for crimes which result in the impairment (physical, developmental, psychiatric) of the victim, and include as "equally guilty", persons who allowed the abuse to occur.

* Create a system of cross-reporting abuse of children with disabilities as well as adults with disabilities, so that background checks of job applicants reveal a history of abuse of persons with disabilities. This would also create a data collection system that could be used to track improvement over the years in reducing the incidence of child-abuse related disability.

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LITERATURE SEARCH

An extensive literature search was conducted during June 1991 for the purpose of identifying the current knowledge about the incidence of disability as a direct result of abuse, and sequelae of the acquisition of the disability. Related information revealed that although the incidence of disability as a result of abuse is anecdotally well acknowledged in the professional community, there is no governmental program in place to enhance the knowledge about this problem, nor are there well directed national programs or campaigns to reduce or eliminate disability that is a direct result of abuse.

It is timely that the Centers for Disease Control are taking a look at issues of disability prevention. It is hoped that this paper will assist in focussing attention, and funding, to this preventable causality of disability.

Overall, most of the recent journal articles dealing with disability and abuse present the same few studies to support their point: child abuse is a significant contributor to the incidence of developmental disabilities, principally mental retardation, cerebral palsy, and physical disability. Following are some of the major findings. Please note that *none of the data presented has been collected by a government agency at any level.*

To date, the government, at federal, state, or local levels, has not seen fit to seriously assess the problem of disability causation by abuse, with the sole exception of the State of Florida, which, as noted elsewhere in this article, specifically authorizes the collection of such data as a part of its child abuse and neglect prevention and intervention program.

While the numbers (i.e., incidence and prevalence) vary, it does become apparent that a most common rate of incidence is estimate to range between 9.5 and

28 percent. This range may reflect a low estimate, particularly if one were to include all types of **physical disability** caused by abuse: sensory impairment, motor impairment, central nervous system injury and impairment; **mental illness**, including severe emotional disturbance, schizophrenia, psychoticism, depression; and **developmental disability** including epilepsy, mental retardation, cerebral palsy, and other learning and mental disabilities that create an impediment to the normal developmental progress and sequence. Most professionals in the field of disability agree that a reliable estimate would be that about 25% of all disabilities are caused by abuse.

SYNOPSIS OF EXISTING RESEARCH FINDINGS REGARDING DISABILITY CAUSED BY ABUSE

The following is an examination of the literature for specific statistical data that contribute to our knowledge regarding the actual size of the problem:

* That mental retardation and other handicaps can result from physical abuse is certain. In 1962 Kempe et al (1962) noted that of 302 cases studied, 11% of the children had died and 28% had received permanent injury. Terr (1970) in a longitudinal study of 10 battered children and their families over a 6-year period noted psychomotor retardation in the abused youngsters.

* Martin (1972) found that 33% of the children (N=42) who had been physically abused had an IQ less than 80.

* Sandgrund (1974) found that of 120 children (60 abused, 30 neglected, 30 non-abused) 25% of the abused group were found to be mentally retarded (I.Q. >70) compared to 20% of the neglected group and 3% of the non-abused group. The proportion of low I.Q. children in the abused and neglected groups was almost 10 times that of the control group.

* The National Clearing House on Child Abuse and Neglect (DHHS) in Denver, produced a later report on which Lebsack commented that (cited in Soeffing, 1975) of the 14, 083 abused and neglected children reported 4.8% were emotionally disturbed, 2% mentally retarded, 1.7% physically handicapped, 1.3% had congenital defects, and 1.8% chronic illness. Since many states do not report special characteristics of the abused child, these figures must be considered low.

* In a 1980 report from USDHHS, National Center on Child Abuse and Neglect, the numbers cited above increased as follows: Reports submitted by 50 States, the district of Columbia, Puerto Rico and the Virgin Islands reported that of abused and neglected children, 2.3% were mentally retarded, 1.9% were physically handicapped, and 1.8% chronically ill. This was based on 63,424 substantiated reports, and a total of 76,804 reports. Some bureaus did not provide information on handicapping conditions of maltreated children.

* Frodi's (1981) review found that developmentally disabled children were consistently overrepresented in studies of abuse of and

neglect. Other child abuse researchers have found that between 20% and 70% of maltreated children have physical or mental disabilities (e.g. Chotiner & Lehr, 1976; Sandgrund, Gaines & Green, 1974).

* Martin, in a 3-year follow-up of 42 physically abused children reported that 33% of the children were found to be functioning retarded, had a developmental quotient below 80, and 43% had neurological sequelae. Of the entire group, 31% had a history of skull fracture of subdural hematoma.

* In 1974, Martin, Beezley, Conway and Kempe concluded that "the abused child is at high risk for damage to his nervous system and maldevelopment of ego functioning. Actual loss of central nervous system tissue by physical trauma accounts for the mortality and morbidity in these children" (p.43).

* Birrell and Birrell (1968) reported 29% and Johnson and Morse (1968) 17% of their samples were retarded. In another study, 43% of subjects had IQ's less than 80 (Morse, Sahler, & Friedman, 1970) with eight of the nine retarded children considered to have been retarded prior to abuse. The difficulty with this interpretation is that abuse is often repeated with the research being conducted only after repeated batterings. Sangrund, Gaines and Greene (1974), after excluding cases of major skull trauma, found 25% of abused compared to 3% of accidentally injured children had IQ's below 70. Even here, the likelihood of prior abuse cannot be ignored, e.g., shaking of young infants can cause central nervous system damage.

* Eppler and Brown (1977) analyzed records of 436 retarded children for evidence of abuse or neglect prior to the diagnosis of retardation. They found such evidence in 14.9% of the children, with 5.7% having been physically abused."

* The United Cerebral Palsy Association conducted a survey in which 2771 children were surveyed. UCP was asking about the total number of children with acquired disabilities and the causes of such disabilities. With a 75% return rate of questionnaires, 9.4% of the children had disabilities of postnatal onset. Of 42 programs responding, 33 reported either known abuse or suspected abuse.

* In another study, Diamond and Jaudes (1983) found postnatal onset of cerebral palsy in 21% of the children. They indicated this figure was consistent with the findings of other investigators. Most of these children became disabled prior to three months of age. Substantiated abuse was reported as a cause of disabilities in 1.1 % of the sample; an additional 1.2% were suspected abuse cases. For another 2.4%, "other accidents or no cause" were reported. Combined, the resultant figure of 4.7% is substantially lower than other estimates and research findings.

* Sternfeld (1977) estimated that 12.5% of new cases of cerebral palsy each year in the United States are caused by child abuse.

* Buchanan and Oliver (1979) found that at least 3% and perhaps as much as 11% of the mental retardation in their study

sample was the result of violence.

* The American Humane Association estimates that 3% of the total cases of child abuse each year, "result in serious injuries", with 2000 to 5000 deaths.

* The evidence supports the contention that a significant number of abused children are mentally retarded. Elmer (1977), in a follow-up to her 1967 study on traumatized infants, found that 47% of the abused children were less than average achievers; 24% were poor to very poor in neurologic integrity. It can be expected that in almost any group of physically abused children from 20-50% will have significant impairment of neurologic function, ranging from severe to mild brain damage.

* Several authors (Chase & Martin, 1970); Elmer, 1977; Martin, 1976) have indicated that mental retardation in abused children is caused by a combination of factors, including head injuries, undernutrition, and an abusive environment. Martin (1976) cites undernutrition as one of the most common forms of "passive abuse" or neglect. Postnatal undernutrition is a frequent concomitant of child abuse. Chase and Martin have suggested that permanent retardation can result from undernutrition in the first year of life. This critically important first year is the time when the child is most susceptible to battering, as well.

* In a study by La Rabida of 162 children with cerebral palsy, chid abuse was found to be the cause of the handicapping condition for 14 of the 162. Of the 14, 12 are mentally retarded. All 14 had sustained severe head injuries before the age of 1 year.

* Martin examined 42 abused children 3 years post-injury and found 1/3 to be mentally retarded; nearly 1/2 had neurological problems. In another 4.5 year follow-up, Martin found that 1/3 had severe handicaps and 1/2 had neurological problems. Most of the studies dating from the past 15 years reiterate that head injury is a significant cause of developmental handicaps. Paradoxically, a lack of awareness of battery as the origin of head injury has also been noted.

* In a retrospective study of psychiatrically hospitalized multihandicapped children (Ammerman, et.al.), 150 charts were analyzed. Of these, 39% had documented evidence or warranted high suspicion of past or current abuse and/or neglect. Physical abuse was the most frequent form of maltreatment (69%), followed by neglect at 45%, then sexual abuse 36%. Most of the patients (52%) experienced multiple forms of maltreatment concurrently, although some were maltreated at different times throughout their childhood. The most common form of maltreatment was physical abuse alone (24%), followed by physical abuse and neglect (21%), physical and sexual abuse, physical and sexual abuse and neglect, sexual abuse alone, and neglect alone (12% each). 40% of the sexually abused children were assaulted by multiple perpetrators, and 66% of the sexual abuse cases involved penetration. Most of the patients (45%) were initially

maltreated in the first two years of life. Within each type of maltreatment, age of first occurrence was birth - 2 years in 46% of the physically abused patients, 49% of sexually abused patients, and 68% of the neglected patients.

* Frodi, Humke and Demro, in a pilot investigation of 14 abusive mothers found that 23% of their children were at least 2 years behind in school.

SYNOPSIS OF EXISTING RESEARCH FINDINGS REGARDING DISABILITY CAUSED BY NEGLECT

The following is an examination of the literature for specific statistical data that focus on disability caused by neglect:

* Studies of children hospitalized for growth failure present serious problems. Chase and Martin studied 19 children who had been hospitalized under the age of one year for malnutrition; at a mean time of 3-1/2 years later, 68% were still below the third percentile in height, 53% in weight, and 37% in head circumference. Developmental scores were also depressed, to as low as 70, when the growth failure was diagnosed after four months of age.

* In a retrospective study of forty children hospitalized for nonorganic growth failure by Glaser et al, 42.5 percent were below the third percentile in either height or weight or both. Of the nineteen children in school, seven were experiencing school failure and several

children had psychological problems. A study by Elmer et al described 15 children at a mean time of almost five years after hospitalization for malnutrition due deprivation. Of the fifteen, seven children were below the third percentile in both height and weight. Over 50% of these children showed some degree of retardation intellectually. Of the seven children in school, four had major behavioral disturbances and 6 were in special education.

* Hufton and Oates found 5 out of 21 children with histories of malnutrition, six years post-hospitalization were still below the 10th percentile in growth delay. 50% had personality difficulties, 50% were functioning below average in school. Some had suffered subsequent physical abuse with two deaths. 13 years post - hospitalization, 14 were re-evaluated. As a group, they were delayed in reading ability, language development, verbal intelligence, and social maturity. 50% had behavior problems.

DISABILITY CAUSED BY ABUSE OR NEGLECT

TABLES OF FINDINGS

TABLE 1: PERCENT OF CHILDREN DISABLED BY ABUSE OR NEGLECT

STUDY	PERCENT OF DISABILITY CAUSED BY:	
	VIOLENCE	NEGLECT
KEMPE, ET AL. 1962	28	
MARTIN 1972	33	
SANDGRUND 1974	25	20
EPPLER & BROWN 1977	14.9	
UNITED CEREBRAL PALSY	9.4	
DIAMOND & JAUDES 1983	21	
STERNFELD 1977	12.5	
BUCHANAN & OLIVER 1979	3 - 11	
AMERICAN HUMANE	3	
ELMER 1977	47	
SANDGRUND	20 - 50	
MARTIN	50	
MARTIN	50+	
FRODI ET AL	25	
CHASE & MARTIN		68
GLASER ET AL		42.5
ELMER ET AL		50+
HUFTON & OATES		50

TABLE 2: PERCENT OF ABUSED CHILDREN WITH DISABILITIES

STUDY	PERCENT OF ABUSED CHILDREN WITH DISABILITIES (UNKNOWN WHICH CAME FIRST)
ELMER 1973	53
MORSE, ET AL. 1970	42
NATIONAL CLEARING HOUSE 1974	8.5
NATIONAL CLEARING HOUSE 1980	4.2
AMMERMAN, ET AL	39
BIRRELL & BIRRELL 1968	29

TABLE 1: Regarding the causation of disability, when determining an average "finding", the average of the above studies is 25.8% for violence causing disability, and 52.5% for neglect causing disability.

TABLE 2: The National Clearinghouse res[illegible] are markedly low. Eliminating their figures, the averaging would be a 40.7 concomitance of abuse and disability. [illegible]luding their findings yields an average concomitance of 29.3%.

Prepared by Spectrum Institute

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The studies reveal a great deal of interest and concern within the professional community on the relationship of abuse and disability. It is now time, however, for the government to take an aggressive position for the elimination of this problem. Scattered studies, with varying levels of accuracy, do not provide the type of information that will be needed to establish a well organized national education and prevention program.

Further review of the literature provides information on the various types of disability-causing atrocities, including head trauma, burning (the fourth most frequent cause of death in children under one year of age; 70-90% occur in the home; abusive burns are likely to be underdiagnosed; burn injury is a major cause of death and disability in childhood [Feldman]; general maltreatment and neglect, and the short- and long-term effects on the child and his or her family of the resulting disability. Additional sources discuss the alarmingly increased rates of abuse suffered by those already disabled. In addition, the literature describes reasons for persons to abuse (98+% are non-strangers) and the inter-relationship of stress, socio-economic status, and the pressures created in a family by the disability factor that may be a predictor of abuse. These issues will not be discussed here, as this paper is directly concerned with the causation of disability by abuse. Although of great importance, the additional critical issues are not included here, but are reviewed in other work available through our office.

In April 1991 the National Committee for Prevention of Child Abuse released its most recent findings on child abuse statistics and prevention trends. The first study documented that more than 2.5 million reports of maltreatment and over 1200 child abuse related fatalities were reported in 1990. Three children a day were fatal victims of maltreatment.

The DHHS "Working Paper on the Prevention of Disabilities Related to Injury", prepared for the June 1991 Conference notes that approximately 142,000

people die each year as a result of injury, and for each death, 16 persons are hospitalized, requiring ongoing treatment and intervention. If one were to apply the findings of the authors of the working paper to the NCPCA findings, we would find that, nationally, child abuse causes at least 48 children per day to become so disabled that they require hospitalization and ongoing intervention. (17,520 children.)

The American Humane Association estimates that 3% of the total cases of child abuse each year, "result in serious injuries", with 2000 to 5000 deaths. Using the figures from NCPCA of a total of 2.5 million reports of maltreatment, according to American Humane, an estimated 3% (or 7.500) resulted in serious injuries.
It should be noted again, that the figures derived by American Human are much lower than those in other studies. If we were to use the estimate used by the authors of the CDC Working Paper, with 16 becoming severely disabled for each fatality, 32,000-80,000 children become disabled each year as a result of abuse.

FISCAL IMPACT

The costs for children with disabilities naturally exceeds that of raising generic children. Principal differences include an increase in medical, educational, social and psychological services, equipment, special interventions (physical therapy, occupational therapy), in addition to the need for increased supervision.

Another major difference is that children do not outgrow their disabilities. Life-long special needs require continuing intervention.

In California, the Regional Center System provides ongoing case-management and intervention services to the developmentally disabled residents of the state. Most disabled children qualify for services and are enrolled in the system.

The State Department of Developmental Services has a 1.2 Billion dollar

services budget, providing services to approximately 102,000 persons. This comes to roughly $10,000 per person. Obviously, some clients require more intensive services, up to approximately $75,000, while others require minimal supervision, approximately $1000 per year.

These cost estimates could be used to estimate the fiscal impact of child-abuse related disability. Most children disabled by abuse are 5 years of age or less. If a child lives to 60 years of age, 55 years of life will require intervention. At $10,000 per year, this comes to $550,000. Using a low estimate, approximately 18,000 children become disabled each year. This comes to $180,000,000 nationally per year. However, this is only considering the direct budget. Additional costs are required that come from separate local, State and Federal budgets, including but not limited to:

Special Education (Department of Education)
Rehabilitation (Department of Rehabilitation)
Residential Services (Department of Social Services)
Psychiatric/Psychological Services (Department of Mental Health)
Financial Assistance (Social Security/Disability)
Medical Services (Medi-Caid/Medi-Care)

In addition, remain the costs of dealing with abused children, who require ongoing monitoring and services, including, among others:

Social Services (Department of Children Services/Protection)
Legal Protection and Advocacy (Juvenile Court)
Mental Health (Department of Mental Health)

If one were to be able to derive an estimated total per child of the costs of intervention for an abuse-acquired disability, then compare to the cost of prevention services, I think we would find that prevention far and away undercuts the cost.

THE NEED FOR A NATIONAL PROGRAM

It is clear that abuse is a significant factor in the etiology of disability. With studies and professional estimates concurring that approximately 25% of all disabilities are a direct result of abuse, our work is clear.

It is time for the governmental agencies with responsibilities in the areas of child protection and disability, to make abuse prevention a priority.

At this time, no governmental agency has begun to collect data or require states to collect data on the incidence of disability as a result of abuse. Studies have been conducted across the nation, with similar results, and varying levels of quality of research methodology. First, a well-constructed data collection study should be undertaken to validate the findings of the studies, and add to the present knowledge in the field. Next, work should begin immediately to directly address the problem, by making "prevention of disability caused by abuse" a national priority. Each State should be encouraged to develop legislation to address the issue, similar to the model legislation presented in this article. Funding should be authorized to make the legislation active. Public education campaigns regarding the relationship between disability and abuse known to the general public. Although parents appear to be the main perpetrators of abuse, it is clear that for many of them, the abuse is not "intentional", but rather a function of their own "dysfunction", or lack of understanding of the possible consequences of their behavior. If a clear public education campaign were conducted that let people know that abuse creates permanent disability, many parents might change their behavior. The recent study completed by the National Committee for the Prevention of Child Abuse indicates that in 1990 fewer parents were spanking their children and fewer were verbally abusing them. They conclude that the public education campaigns of the last few years has led to this improvement. The same could be done in this field.

Legislation across the nation does not address abuse-caused disability. Eleven states have legislation mentioning both issues. A combination of the elements of the various pieces of legislation, with certain other aspects added, provides for a model legislation that each state could adopt. Florida leads the States in making the prevention of abuse-caused disability a State priority, acknowledging the extent of the problem, and creating [and funding] approaches for intervention and prevention.

The financial impact of abuse-caused disability should raise red flags to every budget-conscious person. At a minimum, the cost to the taxpayers for each new acquired disability exceed $20,000 PER YEAR for the rest of the life of the child. The alternative prevention costs should be developed and compared to the real costs. This comparison may provide incentive to local, state, and federal agencies to devote funding to prevention and data collection efforts.

The Center for Disease Control can take a leadership role in assisting the Federal Government to document the current incidence of abuse-caused disability, and to calculate the costs discussed above.

Clearly, it is not only the fiscal consideration that moves us towards action, but also the human element of needless suffering and impairment.

Further work is needed. However, it is exciting that the Center for Disease Control invited the presentation of this paper at their 1991 Disabilities Prevention Conference.

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FIRST OF A SERIES

This is the first in a series of articles on the problems related to abuse-caused disability. Additional articles to be published will include:

1. A review of the judicial response to abuse of persons with disabilities, as well as persons who are responsible for causing disability.

2. A thorough examination of the California experience. As California is not only the largest State in terms of population, it is also diverse in its geographic composition, multi-ethnic population, rural, urban and suburban constellations, as well as having taken a leadership position among the states in addressing the issues of abuse of persons with disabilities.

3. A third report will spotlight other States who have also taken leadership in the disability/abuse field, particularly Florida.

4. Problems associated with data collection in this field will be reviewed, including issues of proper statistical analyses, research methodology, and research approach to the problem.

5. Additional reports currently available will continue to be updated. These include the State-of-the-Art "Update on Abuse and Disability", which provides a complete overview of the various issues involved in this field, including further explanation and illustration of all types of abuse, the studies to date on the incidence on abuse of persons with disabilities, long term effects of abuse for the person with a disability, and recommendations for intervention and prevention. In addition, bibliographies and resource lists of persons who are active in the field are provided. Information regarding various organizations exclusively devoted to this topic is available, including information on the National Coalition on Disability and Abuse, and the California State Task Force on Abuse and Disability, among others.

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